

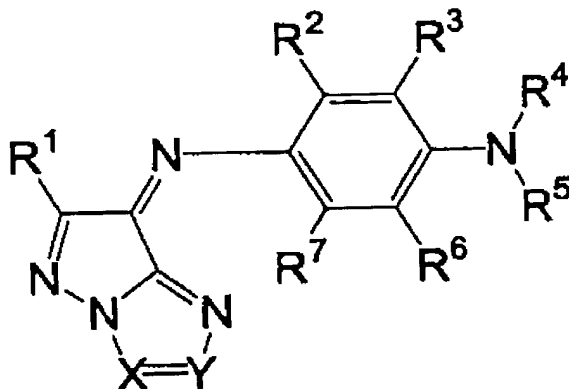
LISTING OF THE CLAIMS:

Claim 1 (Currently Amended): An ink for ink-jet comprising:

a coloring composition containing coloring particulates dispersed in a water based medium, the coloring particulates containing an oil soluble dye and an oil soluble polymer; and wherein the coloring composition has wavelength of maximum absorption ($\lambda_{\text{max}}(\text{nm})$) in the wavelength range from 510 to 560 nm and when the absorbance at the wavelength of maximum absorption ($\lambda_{\text{max}}(\text{nm})$) is regarded as 1, the absorbance at a wavelength ($\lambda_{\text{max}} + 75 (\text{nm})$) is no more than 0.2 and the absorbance at a wavelength ($\lambda_{\text{max}} - 75 (\text{nm})$) is no more than 0.4, and wherein

the oil soluble dye is represented by the following formula (II):

Formula (II)



wherein R^1 represents a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, $-OR^{11}$, $-SR^{12}$, $-CO_2R^{13}$, $-OCOR^{14}$, $-NR^{15}R^{16}$, $-CONR^{17}R^{18}$, $-SO_2R^{19}$, $-SO_2NR^{20}R^{21}$, $-NR^{22}CONR^{23}R^{24}$, $-NR^{25}CO_2R^{26}$, $-COR^{27}$, $-NR^{28}COR^{29}$, or $-NR^{30}SO_2R^{31}$; R^{11} , R^{12} , R^{13} , R^{14} , R^{15} , R^{16} , R^{17} , R^{18} , R^{19} , R^{20} , R^{21} , R^{22} , R^{23} , R^{24} , R^{25} , R^{26} , R^{27} , R^{28} , R^{29} , R^{30} and R^{31} each independently represents a hydrogen atom, an aliphatic group, or an aromatic group;

R^2 , R^3 , R^6 and R^7 each independently represents a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, $-OR^{51}$, $-SR^{52}$, $-CO_2R^{53}$, $-OCOR^{54}$, $-NR^{55}R^{56}$, $-CONR^{57}R^{58}$, $-SO_2R^{59}$, $SO_2NR^{60}R^{61}$, $-NR^{62}CONR^{63}R^{64}$, $-NR^{65}CO_2R^{66}$, $-COR^{67}$, $-NR^{68}COR^{69}$ or $-NR^{70}SO_2R^{71}$; R^{51} , R^{52} , R^{53} , R^{54} , R^{55} , R^{56} , R^{57} , R^{58} , R^{59} , R^{60} , R^{61} , R^{62} , R^{63} , R^{64} , R^{65} , R^{66} , R^{67} , R^{68} , R^{69} , R^{70} and R^{71} each independently represents a hydrogen atom, an aliphatic group or an aromatic group;

R^4 and R^5 each independently represents a hydrogen atom, an aliphatic group, an aromatic group, or a heterocyclic group; and wherein

X represents $-N=$, and Y represents $-C(R^8)=$, wherein R^8 represents a hydrogen atom, an aliphatic group or an aromatic group, and wherein

the oil soluble polymer is a vinyl polymer having at least one of a carboxyl group and a sulfonic acid group as an ionic group,

wherein the oil soluble dye and the vinyl polymer are separate compounds.

Claims 2-4 (Canceled)

Claim 5 (Currently Amended): The ink for ink-jet according to claim 1, wherein in the coloring particulates, the oil soluble dye is dispersed in the oil soluble polymer.

Claim 6 (Previously Presented): The ink for ink-jet according to claim 1, wherein the coloring particulates are obtained by emulsifying and making into fine particles an organic solvent which includes the oil soluble polymer and the oil soluble dye, by either adding water to the organic solvent or adding the organic solvent into water.

Claims 7 and 8 (Canceled)

Claim 9 (Previously Presented): The ink for ink-jet according to claim 1, wherein the ionic group of the vinyl polymer is a carboxyl group.

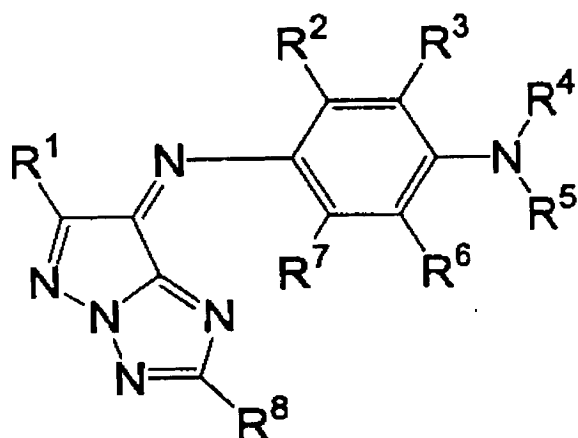
Claim 10 (Previously Presented): The ink for ink-jet according to claim 1, wherein the vinyl polymer has ionic groups in an amount of from 0.1 to 3.0 mmol/g.

Claims 11 and 12 (Canceled)

Claim 13 (Currently Amended): An ink for ink-jet comprising:

a coloring composition dispersed in a water based medium, containing coloring particulates containing an oil soluble dye represented by the following formula (III) and a vinyl polymer having at least one of a carboxyl group and a sulfonic acid group:

Formula (III)



wherein R¹ represents a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, -OR¹¹, -SR¹², -CO₂R¹³, -OCOR¹⁴, -NR¹⁵R¹⁶, -CONR¹⁷R¹⁸, -SO₂R¹⁹, -SO₂NR²⁰R²¹, -NR²²CONR²³R²⁴, -NR²⁵CO₂R²⁶, -COR²⁷, -NR²⁸COR²⁹, or -NR³⁰SO₂R³¹; and R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰ and R³¹ each independently represents a hydrogen atom, an aliphatic group, or an aromatic group;

R², R³, R⁶ and R⁷ each independently represents a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, -OR⁵¹, -SR⁵², -CO₂R⁵³,

$-\text{OCOR}^{54}$, $-\text{NR}^{55}\text{R}^{56}$, $-\text{CONR}^{57}\text{R}^{58}$, $-\text{SO}_2\text{R}^{59}$, $\text{SO}_2\text{NR}^{60}\text{R}^{61}$, $-\text{NR}^{62}\text{CONR}^{63}\text{R}^{64}$, $-\text{NR}^{65}\text{CO}_2\text{R}^{66}$,
 $-\text{COR}^{67}$, $-\text{NR}^{68}\text{COR}^{69}$ or $-\text{NR}^{70}\text{SO}_2\text{R}^{71}$; R^{51} , R^{52} , R^{53} , R^{54} , R^{55} , R^{56} , R^{57} , R^{58} , R^{59} , R^{60} , R^{61} , R^{62} , R^{63} ,
 R^{64} , R^{65} , R^{66} , R^{67} , R^{68} , R^{69} , R^{70} and R^{71} each independently represents a hydrogen atom, an
aliphatic group or an aromatic group;

R^4 and R^5 each independently represents a hydrogen atom, an aliphatic group, an aromatic
group or a heterocyclic ring; and

R^8 represents a hydrogen atom, an aliphatic group or an aromatic group.

wherein the oil soluble dye and the vinyl polymer are separate compounds.

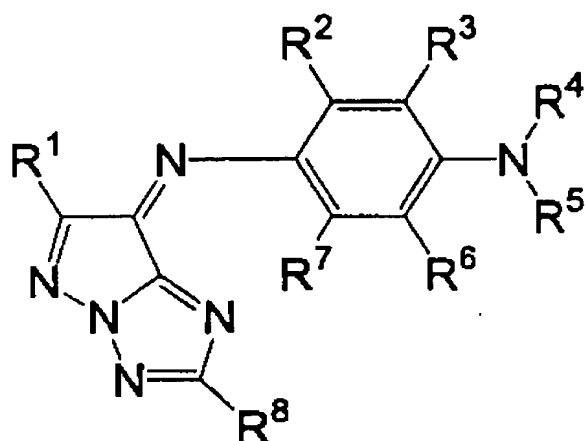
Claims 14-16 (Canceled)

Claim 17 (Currently Amended): A coloring composition comprising:

coloring particulates containing an oil soluble dye represented by the following formula

(III) and a vinyl polymer having at least one of a carboxyl group and a sulfonic acid group, said
coloring particulates being dispersed in an aqueous medium:

Formula (III)



wherein R^1 represents a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, $-OR^{11}$, $-SR^{12}$, $-CO_2R^{13}$, $-OCOR^{14}$, $-NR^{15}R^{16}$, $-CONR^{17}R^{18}$, $-SO_2R^{19}$, $-SO_2NR^{20}R^{21}$, $-NR^{22}CONR^{23}R^{24}$, $-NR^{25}CO_2R^{26}$, $-COR^{27}$, $-NR^{28}COR^{29}$, or $-NR^{30}SO_2R^{31}$; and R^{11} , R^{12} , R^{13} , R^{14} , R^{15} , R^{16} , R^{17} , R^{18} , R^{19} , R^{20} , R^{21} , R^{22} , R^{23} , R^{24} , R^{25} , R^{26} , R^{27} , R^{28} , R^{29} , R^{30} and R^{31} each independently represents a hydrogen atom, an aliphatic group, or an aromatic group;

R^2 , R^3 , R^6 and R^7 each independently represents a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, $-OR^{51}$, $-SR^{52}$, $-CO_2R^{53}$, $-OCOR^{54}$, $-NR^{55}R^{56}$, $-CONR^{57}R^{58}$, $-SO_2R^{59}$, $SO_2NR^{60}R^{61}$, $-NR^{62}CONR^{63}R^{64}$, $-NR^{65}CO_2R^{66}$,

$-\text{COR}^{67}$, $-\text{NR}^{68}\text{COR}^{69}$ or $-\text{NR}^{70}\text{SO}_2\text{R}^{71}$; R^{51} , R^{52} , R^{53} , R^{54} , R^{55} , R^{56} , R^{57} , R^{58} , R^{59} , R^{60} , R^{61} , R^{62} , R^{63} , R^{64} , R^{65} , R^{66} , R^{67} , R^{68} , R^{69} , R^{70} and R^{71} each independently represents a hydrogen atom, an aliphatic group or an aromatic group;

R^4 and R^5 each independently represents a hydrogen atom, an aliphatic group, an aromatic group or a heterocyclic ring; and

R^8 represents a hydrogen atom, an aliphatic group or an aromatic group,

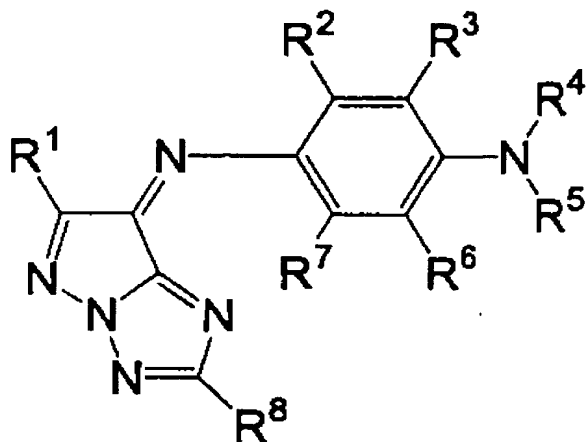
wherein the oil soluble dye and the vinyl polymer are separate compounds.

Claims 18 and 19 (Canceled)

Claim 20 (Currently Amended): An ink-jet printing process comprising:

(a) preparing an ink for an ink jet, containing coloring composition in which coloring particulates contain an oil soluble dye represented by the following formula (III) and a vinyl polymer having at least one of a carboxyl group and a sulfonic acid group, said coloring particulates being dispersed in an aqueous medium,

Formula (III)



wherein R¹ represents a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, -OR¹¹, -SR¹², -CO₂R¹³, -OCOR¹⁴, -NR¹⁵R¹⁶, -CONR¹⁷R¹⁸, SO₂R¹⁹, -SO₂NR²⁰R²¹, -NR²²CONR²³R²⁴, -NR²⁵CO₂R²⁶, -COR²⁷, -NR²⁸COR²⁹, or -NR³⁰SO₂R³¹; and R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰ and R³¹ each independently represents a hydrogen atom, an aliphatic group, or an aromatic group;

R², R³, R⁶ and R⁷ each independently represents a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, -OR⁵¹, -SR⁵², -CO₂R⁵³,

$-\text{OCOR}^{54}$, $-\text{NR}^{55}\text{R}^{56}$, $-\text{CONR}^{57}\text{R}^{58}$, $-\text{SO}_2\text{R}^{59}$, $\text{SO}_2\text{NR}^{60}\text{R}^{61}$, $-\text{NR}^{62}\text{CONR}^{63}\text{R}^{64}$, $-\text{NR}^{65}\text{CO}_2\text{R}^{66}$,
 $-\text{COR}^{67}$, $-\text{NR}^{68}\text{COR}^{69}$ or $-\text{NR}^{70}\text{SO}_2\text{R}^{71}$; R^{51} , R^{52} , R^{53} , R^{54} , R^{55} , R^{56} , R^{57} , R^{58} , R^{59} , R^{60} , R^{61} , R^{62} , R^{63} ,
 R^{64} , R^{65} , R^{66} , R^{67} , R^{68} , R^{69} , R^{70} and R^{71} each independently represents a hydrogen atom, an
aliphatic group or an aromatic group;

R^4 and R^5 each independently represents a hydrogen atom, an aliphatic group, an aromatic
group or a heterocyclic ring; and

R^8 represents a hydrogen atom, an aliphatic group or an aromatic group,

wherein the oil soluble dye and the vinyl polymer are separate compounds, and

(b) using the ink for recording in an ink-jet printing device.

Claim 21 (Previously Presented): The ink for ink-jet according to claim 1, wherein R^8
represents a substituted aryl group.

Claim 22 (Currently Amended): The ink for ink-jet according to claim 21, wherein a
total number of substituents represented by $-\text{NR}^{70}\text{SO}_2\text{R}^{71}$ $-\text{NR}^{170}\text{SO}_2\text{R}^{171}$ in the dye thereof is 2
or more.

Claim 23 (Currently Amended): The ink for ink-jet according to claim 13, wherein R^8
represents a substituted aryl group, and wherein a total number of substituents represented by $-\text{NR}^{70}\text{SO}_2\text{R}^{71}$ $-\text{NR}^{170}\text{SO}_2\text{R}^{171}$ in the dye thereof is 2 or more.

Claim 24 (Currently Amended): The ink for ink-jet according to claim 17, wherein R⁸ represents ~~a substituted~~ a substituted aryl group, and wherein a total number of substituents represented by -NR⁷⁰SO₂R⁷¹ ~~-NR¹⁷⁰SO₂R¹⁷¹~~ in the dye thereof is 2 or more.

Claim 25 (Currently Amended): The ink for ink-jet according to claim 20, wherein R⁸ represents ~~a substituted~~ a substituted aryl group, and wherein a total number of substituents represented by -NR⁷⁰SO₂R⁷¹ ~~-NR¹⁷⁰SO₂R¹⁷¹~~ in the dye thereof is 2 or more.